26th Annual NABE Economic Policy Conference

Labor Markets and Monetary Policy

Remarks for the

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Good morning. It is a pleasure to be with you today. This year's conference, and the topics being discussed, are of great importance to us all—economists, regulators, market participants and policymakers. We share a common interest in fostering the economic recovery and a return to strong growth in an environment of low and stable inflation. Conferences such as this one bring together diverse perspectives that will help in devising solutions to achieve these goals.

Today I would like to discuss a few challenging issues that the labor market presents for monetary policymaking. For a bit of context, let me say that I approach this from not just the perspective of a Fed bank president, but also of a macroeconomist and former Fed research director. I've had the benefit of attending FOMC meetings since 1995. I have observed firsthand some of the conflicts that FOMC members face in addressing the Fed's dual mandate to promote maximum employment and price stability even in more normal times. For me, price stability is 2 percent inflation as measured by the Personal Consumption Expenditures (PCE) deflator over the medium term. When I became Chicago Fed president in 2007, I never would have guessed that my first 2-1/2 years would have me voting continually for lower interest rates and more policy accommodation. But with the unemployment rate at 9.7 percent and inflation

significantly under my benchmark for price stability, there is no conflict between our policy goals, and so the directions for policy have been clear. Today, I will highlight a number of labor market issues that lead me to think this accommodation will likely be appropriate for some time.

Let me emphasize that the views that I am presenting today are my own and not necessarily those of the Federal Open Market Committee (FOMC) or my other colleagues in the Federal Reserve System.

I find myself in broad agreement with the view that restrictive bank credit, along with business and household caution, will continue to restrain the recovery's strength but that these headwinds will abate as we move through 2010. Most business cycle indicators have turned favorable already. Yet many households and businesses remain wary that a full-fledged recovery is in train. That is not surprising. As we all know, employment is often the last piece of the puzzle to fall into place, and until the economy begins to add jobs in significant numbers, for many it will not feel like much of a recovery.

The latest reports on this front have been mixed. Layoffs are subsiding. Firms are hiring more temporary workers, and after a large decline, the average workweek is showing signs of stabilizing and perhaps reversing course. These developments usually are precursors of a broader scale recovery in labor demand. But, today, employers remain cautious. Job openings are still scarce, and there are few signs, even anecdotally, that

permanent hiring has picked up yet. Moreover, even once labor markets turn the corner, there is a long ways to go before they get back to what we would consider to be normal.

The ongoing weakness in labor markets—and memories of the jobless recoveries from the previous two recessions—have raised concerns that something has fundamentally changed in the way labor markets work. Some worry that they have deteriorated more than would be expected given the declines in output during the recession and, in turn, this additional weakness might impinge on the speed of the recovery moving forward.

Headline unemployment numbers are consistent with the recession

The usual starting point for thinking about this issue is Okun's famous "law" relating gross domestic product (GDP) growth to the change in the unemployment rate. The usual estimates of Okun's law imply that the unemployment rate should be at least a percentage point lower than the 9.7 percent we actually saw last Friday.

However, this calculation assumes that the association between economic activity and the unemployment rate does not vary across the business cycle. In fact, many employment indicators tend to deteriorate faster during recessions than they improve during expansions. A simple statistical model that uses the historical relationship between GDP growth and unemployment *estimated only during recessions* can actually account for the sharp rise in the unemployment rate. Figure 1 compares the actual unemployment numbers (the blue line) to their predicted values from models estimated using GDP data only from recessions (the red line). The two lines are just about spot on. But the green line—the prediction from a standard model that does not distinguish between behavior in expansions and recessions—is not capable of capturing the current numbers. Similar "recession-only" models can also explain the rise in broader measures of unemployment and "underemployment" like the U.S. Bureau of Labor Statistics' U-6 rate, as well as the declines in payroll employment.¹

Based on these exercises, I think that it is reasonable to conclude that the unemployment rate and employment growth have evolved about as we would expect given the severity of this recession.

But other labor market measures are weaker than expected

Once you look past the headline numbers, however, some other labor market indicators *are* unusually weak. In particular, the share of adults who are outside the labor force has increased more, and the average length of a spell of unemployment has grown much longer than predicted by even our "recession-only" models.

I would like to spend some time elaborating on the implications of the increase in unemployment duration. Much of this material will be appearing in a forthcoming article by my colleagues at the Chicago Fed, Dan Aaronson, Bhash Mazumder, and Shani Schechter. The consequences of long-term unemployment on households can be quite severe. Such households, especially those with little or no wealth, are susceptible to sharp falls in consumption. Moreover, long-term unemployment often leads to a significant loss in permanent earnings even after the worker finds a new job.

¹ For further details, see Aaronson, Brave, and Schechter (2009).

Unemployment duration has risen at an unprecedented rate over the past year or so. In February, over 40 percent of the unemployed were in the midst of a spell lasting more than six months, by far the highest proportion in the post-World War II era.

You can see this in figure 2, which plots from 1948 to the present the relationship between the unemployment rate (x-axis) and the average length of an ongoing spell of unemployment (y-axis). The red dots represent the monthly figures for 2008 and 2009. At the beginning of the recession, the unemployment rate was at 5 percent and the average unemployment duration was about 17 weeks. Duration was already about 4 weeks more than what would be predicted based on the average historical relationship, represented by the black regression line, between the two measures. This divergence is largely accounted for by a secular shift toward longer spells of unemployment due to the aging of the work force and the much stronger labor force attachment of women.

In the first 15 months of the recession, average duration increased with unemployment at roughly the rate you would have expected. This is indicated by the series of red dots that fall along the top of the blue cloud and are parallel to the black line. But since the first quarter of 2009, average duration has increased much more rapidly than the rise in the unemployment rate would predict.

The extension of unemployment insurance benefits, while helpful in supporting unemployed households, likely accounts for a portion of the recent rise in unemployment duration.² Even so, we view the overall magnitude of the increase as an indicator that labor market conditions are even bleaker than the unemployment rate alone suggests. This weakness may also explain why the share of those outside the labor force has also grown so much—many people have simply stopped searching for jobs given the lack of demand for their services at prevailing wages.

Implications of rising long-term unemployment on the outlook

The rise in long-term unemployment may have ramifications for the economy going forward. The likelihood of finding a job tends to decline as an individual remains out of work for a longer period. Partly this reflects the fact that those who typically have a difficult time finding work will tend to be unemployed longer. In this case, longer spells are a symptom rather than the source of an underlying problem. However, a long unemployment spell could itself *cause* deterioration in a worker's skills, leaving some of the long-term unemployed with less bright job prospects even as the economy begins to revive. This could contribute to high average unemployment duration for some time. We can gain some insight into this dynamic from earlier periods. Figure 3 highlights the path of the unemployment rate and duration during the last two severe recessions. As you'd expect, both measures rise in tandem during the recession. But during the recovery phase, unemployment duration remains persistently high for quite some time even as the unemployment rate declines. We expect to see a similar pattern in the near

² Aaronson, Mazumder, and Schechter (2010) apply estimates from Katz and Meyer (1990) and Card and Levine (2000) of the elasticity of increases in the maximum eligibility time for unemployment insurance benefits on the duration of unemployment to the current context. These calculations suggest that federal extensions may account for between 10 percent and 25 percent of the observed rise in mean durations from July 2008 through December 2009. Some caution should be applied to these estimates, since they rely on strong assumptions.

future. And as I noted earlier, long-term unemployment tends to lead to permanent earnings losses, particularly for those who have previously invested heavily in job- or industry-specific skills. So, high unemployment durations could have long-lasting effects on consumer confidence and demand.

To summarize this discussion of the labor market, headline employment indicators appear to be roughly following a conventional track given the severity of the recession. But these measures may not fully capture the weakness displayed in the rising unemployment duration and the withdrawal of workers from the labor force. These developments thus raise the risk that the recovery in labor markets could be slow even as output returns to a well-established growth path.

Productivity and resource slack

The other side of an economy experiencing growing output but low labor utilization is high productivity growth. Indeed, productivity has been quite strong of late, particularly over the past three quarters. This is often the case in the early stages of a recovery, as firms first meet higher demand for their products and services without expanding their work force.

A key question today is the degree to which the recent productivity surge reflects a temporary cyclical development or a more enduring increase in the level or trend rate of productivity. If the gains are predominantly driven by intense cost cutting, then they may be unsustainable once demand revives more persistently. In this case, we would expect hiring to pick up quickly as the economic expansion takes hold. However, if the level or trend in productivity has risen due to technological or other improvements, then higher average productivity gains will continue. In this case, the implications for hiring are not clear. Higher levels of productivity will show through in both higher potential and actual output for the economy, and so need not necessarily come at the cost of lower labor input.

The relative importance of these factors also has consequences for our assessment of the degree to which resource slack exists in the economy. Since a higher level or trend of productivity implies a higher path for potential output, a given level of actual GDP would also be associated with a greater degree of economic slack. That is, the good news on productivity, if sustained, suggests that as of today we have a larger output gap to fill In contrast, some are skeptical that the economy really is operating far below sustainable levels. They argue that much of the drop in output during the recession was the result of a permanent reduction in the economy's productive capacity, perhaps because certain financial market practices that had for a time enabled additional investments have now been discredited. According to this view, the strong productivity growth of recent quarters only goes a fraction of the way toward offsetting this decline in the level of potential output.

Of course, the unemployment rate gives us another way to infer the degree of slack in the economy. My earlier discussion of the sharp rise in unemployment duration and decline in labor force attachment may lead one to think that slack is even greater than what is implied by the unemployment rate itself.

However, it is possible that longer durations and lower labor force attachment could reflect broader structural changes in the economy, such as a mismatch between the skills of the unemployed and those demanded by employers. There may also be other impediments that currently prevent workers from shifting to the industries or locations where jobs are available. Under these scenarios, labor market slack might actually be lower than what one might infer from the unemployment rate alone.

I have just given you 2 minutes of classic two-handed economist speak. In the final analysis, however, the sheer magnitude of unemployment today is so large that there is little doubt in my mind that there is considerable slack in the economy. Incorporating alternative views about productivity and labor market behavior do not alter this general conclusion. The debate really boils down to whether the amount of slack in the economy is large or is extremely large.

Should the Fed have done more?

Given this large degree of slack, there is a legitimate question of whether monetary policy could, and more fundamentally should, have done more to combat the deterioration in labor markets. As we all know, a lot was done. As the crisis arose, we first used our traditional tools, substantially cutting the federal funds rate and lending to banks through our discount window. As we neared a zero funds rate, we turned to nontraditional tools to clear up the choke points, providing liquidity directly to nonbank financial institutions and supporting a number of short-term credit markets. Finally, we reduced long-term interest rates further by purchasing additional medium- and longterm Treasury bonds, mortgage-backed securities, and the debt of governmentsponsored enterprises.

These nontraditional actions helped us avoid what easily could have been an even more severe economic contraction. But the unemployment rate still hit 10 percent this fall.

Had we done more, the most plausible action would have been to expand our Large Scale Asset Purchases (LSAP) program. Precisely quantifying the effect this would have had is difficult. A good place to start, though, is to look at the recent empirical evidence.³ When significant new asset purchases were announced, our big, fluid financial markets built that information immediately into asset prices. For example, right after the March 2009 Treasury purchase announcement, ten-year Treasury yields fell about 50 basis points. Comparable declines occurred in Option Adjusted Spreads (OAS) on the announcement of agency mortgage-backed securities (MBS) purchases in November 2008. It might be reasonable to infer that say, doubling the size of the LSAPs might have doubled this impact on rates.

However, I would attach more than the usual amount of uncertainty to such an inference. Part of my hesitation reflects our lack of understanding about the interactions between nontraditional monetary policy, interest rates, and economic activity. While

³ See Sack (2009) as well.

research efforts at the Federal Reserve and elsewhere to assess the effects of nonstandard monetary policy have been ramped up considerably, to date we do not have a robust suite of formal models to reliably calibrate interventions of this sort.

Moreover, there are reasons to expect that the impact of recent nontraditional policy actions might not have scaled up so simply. We initially responded to the financial crisis with our highest-value tool—a reduction in the funds rate—and then moved to our best alternative policies as interest rates approached zero. Finally, we turned to the LSAPs, which were designed to further lower long-term interest rates and thus stimulate demand for interest-sensitive spending, such as business fixed investment, housing, and durables goods expenditures. But the influence of lower rates on private sector decision-making may have reached the point of second-order importance relative to the countervailing forces of the housing overhang, business and household caution, and considerably tighter lending standards.

Moreover, although it is impossible to quantify, a portion of the impact of our nontraditional actions may have come simply from boosting confidence. In those very dark times, I believe households, businesses, and financial markets were reassured that policymakers were acting in a decisive manner. Further asset purchases would not have had an additional effect of this kind.

In addition, on a practical level, the portfolio of future purchases likely would have looked different and therefore their overall effectiveness might have deviated from our recent experience. The Fed's typical monthly purchases of new issuance MBS were so large that it left very little floating supply for private investors. This could have forced a larger LSAP program to concentrate more heavily in Treasuries or existing MBS. Though the empirical evidence is limited, these assets likely are less close substitutes than new MBS for many of the instruments used to finance spending on new capital goods, housing, and consumer durables. Consequently, the effect of their purchase on economic activity may be less.

Finally, we must also keep in mind that more monetary stimulus also has costs. These could be considerable at higher LSAP levels. Many are already worried about the inflation implications of the Fed's expanded balance sheet and the associated large increase in the monetary base. Currently, most of the increase in the monetary base is sitting idly in bank reserves—and because banks are not lending those reserves, they are not generating spending pressure. But leaving the current highly accommodative monetary policy in place for too long would eventually fuel inflationary pressures. Likewise, if the monetary base was expanded much beyond where we are today, the risk that such pressures would build as the economy recovers would be significantly increased. Furthermore, policymakers already face the task of unwinding a sizable balance sheet at the appropriate time and pace. Substantially increasing the size of asset purchases could have further complicated the exit process down the road.

That said, changes in economic conditions could alter the cost-benefit calculus with regard to the LSAP. Hopefully the recovery will progress without any serious bumps in

the road and the inflation outlook will remain benign. But, as we have repeatedly indicated in the FOMC statements, the Committee will continue to evaluate its purchases of securities in light of the evolving economic outlook and conditions in financial markets.

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Figure 1: Actual versus predicted unemployment rate



Figure 2: Unemployment rate versus average unemployment duration, 1947-2010



Figure 3: Unemployment rate versus average unemployment duration, Selected cycles